

COMMAND SUMMARY

This appendix summarizes the command-line utilities presented in this book. Although all options are not included, the brief definitions in this quick-reference format should enable you to locate needed commands quickly.

To learn more about a command, use the `man` or `info` command with the command in question. For example, to learn about the `ls` command, enter `man ls` or `info ls`. Sometimes the `man` page will inform you that the `info` page is more up-to-date. If you are uncertain which command you need, try the `apropos` command with a keyword. This searches the `man` page database and reports all `man` pages (thus all commands) that include the keyword you entered.

LINUX COMMANDS

Command name	Description	Useful options
<code>alias</code>	Assign a new name to a command.	
<code>apropos</code>	See a list of <code>man</code> pages that contain a given keyword.	
<code>at</code>	Set up a one-time task for later execution by <code>atd</code> .	<ul style="list-style-type: none">• <code>-l</code> lists all queued tasks (like <code>atq</code>).• <code>-d</code> removes a queued task (like <code>atrm</code>).
<code>atq</code>	See the list of jobs submitted to <code>atd</code> using the <code>at</code> command.	
<code>atrm</code>	Remove a scheduled job from the queue of jobs to be executed by the <code>atd</code> command.	
<code>bash</code>	The default Linux shell.	
<code>batch</code>	Set up a scheduled task for future execution by the <code>atd</code> daemon when the processor load falls below a certain level.	
<code>bg</code>	Make the current process a background process of the current shell.	
<code>cat</code>	Print the contents of a file or files to <code>STDOUT</code> .	<code>-n</code> displays line numbers.
<code>cd</code>	Change directory.	

Command name	Description	Useful options
<code>chgrp</code>	Change the group assigned to a file or directory.	
<code>chmod</code>	Change the permissions assigned to a file or directory.	
<code>chown</code>	Change the user (owner) and optionally the group assigned to a file or directory.	
<code>clear</code>	Clear the screen.	
<code>cp</code>	Copy files or directories from one location or filename to another.	<ul style="list-style-type: none"> • <code>-i</code> requests confirmation if the target file already exists. • <code>-r</code> copies directories to a new directory.
<code>cpio</code>	Back-up utility, similar to <code>tar</code> .	
<code>crontab</code>	Submit a script with assigned times for repeated future execution by the <code>cron</code> daemon.	<code>-u</code> allows the <code>root</code> user to set a cron job for a specific user.
<code>date</code>	Display the system date and current time.	
<code>df</code>	Display file system information for all mounted standard file systems (not <code>swap</code> and <code>proc</code>).	<code>-l</code> limits the listing of file systems to local file systems.
<code>dmesg</code>	Display the contents of the kernel ring buffer, where certain kernel messages are stored.	
<code>du</code>	Display usage information about the size of a directory and its subdirectories.	<code>-s</code> displays only a summary (total size).
<code>dump</code>	Back up data in a file system.	
<code>echo</code>	Display text to STDOUT.	<code>-n</code> prevents the standard new-line character at the end of the output.
<code>emacs</code>	A powerful text-mode editor.	
<code>exit</code>	Log out of a session or window.	
<code>export</code>	Make an environmental variable available to other processes.	
<code>fg</code>	Move a process to the foreground of the current shell, so that the output of the process is displayed.	
<code>file</code>	Display information about the content and file type of a file.	

Command name	Description	Useful options
find	Search for files with certain characteristics and list them or perform other actions on each one.	<ul style="list-style-type: none"> -name filename finds files with the specified filename. -print prints the pathname for each file found. -type file type finds files with the specified access type. -user username finds files owned by the specified user. -perm permission code finds files with the specified file permissions.
free	Display the amount of free memory and swap space, with usage details on each.	-t includes a line with totals.
ftp	Access an FTP server using the file transfer protocol.	
grep	Search for a pattern using a regular expression within a file, group of files, or other input stream (using a pipe symbol).	<ul style="list-style-type: none"> -c displays the count of matching lines. -i ignores case in the matches. -l lists only filenames. -n displays line numbers. -v displays lines that do not match the pattern provided.
gunzip	Uncompress a file that was compressed using gzip .	
gzip	Compress a file, adding the .gz file extension to it.	<ul style="list-style-type: none"> -l lists statistical details for each file being compressed. --fast compresses more quickly. --best creates a smaller compressed file.
halt	Shut down all processes and halt the system so it can be powered off.	
head	Display the first 15 lines of a file.	-n displays the first <i>n</i> lines of the specified file.
history	Display recently used commands.	
hostname	Display the hostname of the system.	
ifconfig	Display or configure the networking interfaces that are part of the Linux kernel.	
joe	A full-screen text-mode editor.	
kill	Send a signal to a process; often used to end a process.	
killall	Send a SIGKILL signal to a process or processes started by the command name given as a parameter.	

Command name	Description	Useful options
less	Display STDIN (or a file) one page at a time.	
lisa	Caldera Systems' text-mode administration utility.	
ln	Create a link from one file or directory to another (both symbolic and hard links can be created).	
locate	Search an internal index of the file system for any files or directories matching the given string.	
login	Log in to the system using a user-name and password.	
logout	End a login session.	
lpc	Control the lpd line printer daemon, setting queuing and printing options for all defined printers.	
lpq	Display print jobs within a print queue.	-P <i>printer</i> defines the print queue to view.
lpr	Print a file.	<ul style="list-style-type: none"> -P<i>printer</i> defines the print queue to send the print job to. -# defines the number of copies to print. -m sends an e-mail message to the user when the print job has been completed.
lprm	Remove a print job from a print queue.	-P <i>printer</i> defines the print queue from which the print job will be deleted.
ls	List the contents of a directory.	<ul style="list-style-type: none"> -l lists additional (long) format information about each item. -a displays hidden files. --color attempts to list files and directories with color codes by type. -i display the inode number of each file.
make	Compile or otherwise assemble the source code components of a program into a runnable binary file using a Makefile as instructions.	
makewhatis	Create a database of man pages for use by the apropos command.	
man	Display an online manual page for the given command.	

Command name	Description	Useful options
mcopy	Copy a file or files to or from the floppy disk drive.	
mdel	Delete a file or files from the floppy disk drive.	
mdir	List the files on a floppy disk drive.	
mkdir	Create a new subdirectory.	
mke2fs	Format a device with the ext2 file system.	
mkfs	Format a device with the file system included as a parameter.	
mkswap	Format a device as swap space (virtual memory).	
more	Display STDIN (or a file) one page at a time.	
mount	Allow access to a named file system via a named directory mount point.	<ul style="list-style-type: none"> -r makes the file system being mounted read-only. -t specifies the file system type (such as ext2).
mv	Rename or move one or more files or directories.	
passwd	Set or reset the password for a user account.	
pico	A full-screen character-mode text editor with on-screen help.	
pine	A text-mode e-mail reading program.	
ping	Send a data packet to a network address to test whether that address is reachable.	<ul style="list-style-type: none"> -c count defines how many packets to send. -s packetsize defines how many bytes should be in the packet.
printtool	Set up a printer in Red Hat Linux (this is a graphical utility).	
ps	Display information about processes running on Linux.	<ul style="list-style-type: none"> -A displays information on all files. u displays user-related fields. x displays information on processes that have no controlling terminal. f displays parent-child relationships of processes in a tree format.
pwd	Display the current working directory.	

Command name	Description	Useful options
<code>rm</code>	Delete one or more files or directories.	<ul style="list-style-type: none"> • <code>-i</code> requests confirmation before deleting each item. • <code>-r</code> deletes the contents of directories recursively. • <code>-f</code> forces deletion without confirmation.
<code>rmdir</code>	Delete an empty directory.	
<code>route</code>	View or configure the static IP network routing table within the Linux kernel.	
<code>sed</code>	Edit files or STDIN input using patterns and commands.	
<code>shutdown</code>	Shut down the system, optionally providing a message or delay for users working on the system.	<ul style="list-style-type: none"> • <code>-h</code> halts the system. • <code>-r</code> reboots the system. • <code>-c</code> cancels a previously scheduled <code>shutdown</code> command.
<code>sort</code>	Sort lines in a file according to various options.	
<code>su</code>	Change to a new user account.	
<code>tail</code>	Display the last 15 lines of a file to STDOUT.	<code>-n</code> displays the last <i>n</i> lines of the specified file.
<code>tar</code>	Create an archive file containing one or more files or directories, optionally compressing them all.	<ul style="list-style-type: none"> • <code>z</code> compresses the archive. • <code>f filename</code> gives the filename to work with. • <code>c</code> creates a new archive. • <code>x</code> extracts files from an existing archive file. • <code>v</code> gives verbose output (listing files).
<code>telnet</code>	Connect to a telnet server to create a console-like dumb-terminal connection.	
<code>top</code>	Display the processes running on the system sorted with the most processor-intensive task listed first.	<ul style="list-style-type: none"> • <code>-c</code> displays the command line that initiated each process. • <code>-i</code> ignores any idle processes. • <code>-s</code> runs <code>top</code> in secure mode, so no interactive keys function. • <code>-S</code> runs <code>top</code> in cumulative mode for the CPU time field.
<code>touch</code>	Update the last accessed time for a file, or create an empty file if the named file does not exist.	<ul style="list-style-type: none"> • <code>-a</code> updates the access time only. • <code>-c</code> prevents <code>touch</code> from creating a file that does not exist. • <code>-m</code> updates the modification time only.

Command name	Description	Useful options
<code>umount</code>	Unmount a file system that is currently mounted as part of the Linux directory structure.	
<code>unzip</code>	Uncompress a file that has been created using the <code>zip</code> command.	
<code>updatedb</code>	Create an index of the entire file system for use by the <code>locate</code> command.	
<code>vi</code>	A powerful full-screen text editor.	
<code>vmstat</code>	Display virtual memory (swap space) statistics.	<code>-n delay</code> specifies the number of seconds to wait between automatic updates.
<code>wc</code>	Display the number of characters, words, and lines in a file or STDIN input stream.	<ul style="list-style-type: none"> • <code>-c</code> displays only the number of characters (bytes). • <code>-l</code> displays only the number of lines. • <code>-w</code> displays only the number of words.
<code>who</code>	Display a list of users who are currently logged in.	
<code>xload</code>	Display the current processor load from 0% to 100% as a small graphic.	
<code>xlsfonts</code>	Choose from among installed fonts (this is a graphical utility).	
<code>zip</code>	Compress one or more files into a single archive (the resulting file is compatible with ZIP files on Windows systems).	

